

REMARKS

The present application contains claims 1-294, the status of which is as follows:

- (a) Claims 1-188, 190, 195-287, and 289-294 have been canceled without prejudice.
- (b) Claims 189, and 288 are currently amended.
- (c) Claim 191-194 are as originally filed.

Claim 189 has been amended to recite apparatus for measuring mechanical deformation, comprising a base electrode and a deformable electrode, "wherein when no force is applied to the deformable electrode, a distance between the base electrode and the deformable electrode varies along a length of the deformable electrode, the base electrode and the deformable electrode converging to a closest possible distance from each other, which is fixed by the apparatus."

This embodiment is illustrated in Figs. 17A-B of the application, which show:

- a deformable plate 406 (the deformable electrode), which is conductive on at least one large surface thereof; and
- a conductive layer 414 (the base electrode), which is printed on a plate 412.

Conductive layer 414 is shown in dark black lines in Fig. 17B. An insulating layer 418 (shown in vertical hash lines) prevents contact between deformable electrode 406 and conductive layer 414. As described in the application, "Deformable plate 406 and counter plate 412 are preferably compressed and fixed by a fixing pin 420." Fig. 17A shows that the distance between the deformable electrode 406 and the base electrode 414 varies along the length of the deformable electrode. The base electrode and the deformable electrode converge at their central portions where (a) they are at their closest possible distance from each other, and (b) they are fixed, by fixing pin 420, at a fixed distance from each other.

FIG. 17A

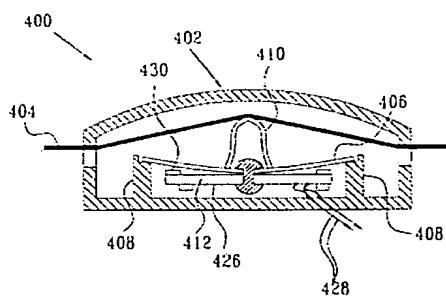
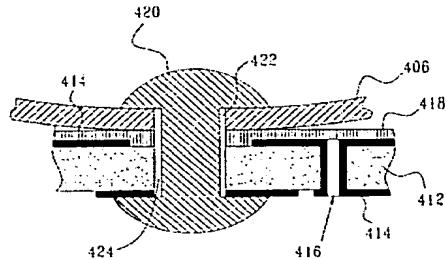
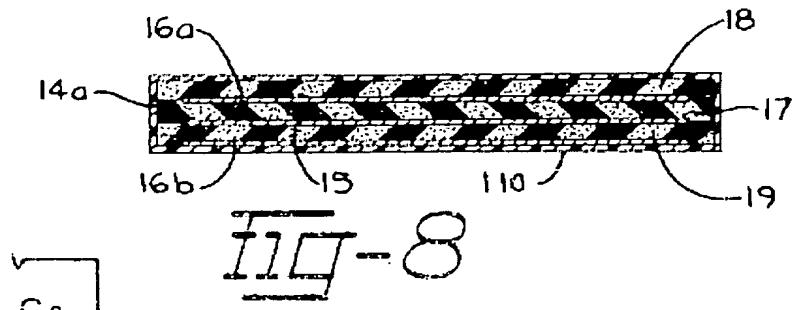


FIG. 17B



Independent method claim 288 is currently amended to be generally parallel to claim 189.

The Examiner rejected claim 189 under 35 U.S.C. 102(b), over US Patent 4,033,332 to Hardway. The Applicant respectfully submits that Hardway does not disclose a deformable electrode and a base electrode, **wherein when no force is applied to the deformable electrode, a distance between the base electrode and the deformable electrode varies along a length of the deformable electrode, the base electrode and the deformable electrode converging to a closest possible distance from each other, which is fixed by the apparatus.** The Examiner states that Hardway describes a base electrode 15 and a deformable electrode 16a (shown below in Fig. 8 of the Hardway patent). Electrodes 15 and 16a are separated by a foam layer 17, which is required in order to provide capacitor functionality between electrodes 5 and 16a.



With the apparatus recited in claim 189 of the present patent application, there is no need to include an insulating layer between the fixed and the deformable electrodes, since the central portion of each of the electrodes are kept at a substantially

fixed distance from each other. The capacitance generated by the device recited in claim 189 depends largely on the distance that the portions of the electrodes are fixed from each other, and the deformability of the deformable electrode, but not on the material which fills the gap between the electrodes. Therefore, the present application states:

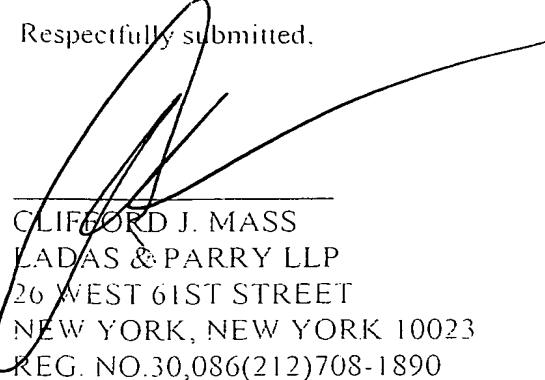
[0411]...It is noted that, unlike most capacitive sensors known in the art which produce changes in capacitance responsive to deformation of an elastic dielectric, the capacitance of device 400 is substantially not dependent on the properties of the material which fills the gap.

The invention claimed in claims 189 and 288 do not require an elastic dielectric, and instead generate capacitive sensing using the claim elements recited. None of the art of record discloses a deformable electrode and a base electrode, **wherein when no force is applied to the deformable electrode, a distance between the base electrode and the deformable electrode varies along a length of the deformable electrode, the base electrode and the deformable electrode converging to a closest possible distance from each other, which is fixed by the apparatus.** Claims 191-194, being dependent from claim 189, are of narrower scope than claim 189. Therefore the Applicant submits that claims 191-194 are patentable in view of the art of record. Furthermore, the Applicant submits that claim 288, being generally parallel to claim 189, is patentable over the art of record for the reasons provided hereinabove, with reference to claim 189.

The Applicant respectfully notes that, in paragraph 2 of the office action, the Examiner states that Applicant has not filed a certified copy of Applicant's foreign priority application. This is respectfully incorrect as a certified copy of the Israel priority application (IL 130818) was filed 19 October 2000 in parent application 09/611,304. Where as here the benefit of a foreign filing date based on a foreign application is claimed in a later filed application (i.e., continuation, continuation-in-part, division) and a certified copy of the foreign application as filed has been filed in a parent or related application, it is not necessary to file an additional certified copy in the later application (see MPEP 201.14(b)). For the Examiner's convenience, Applicant submits herewith a duplicate certified copy of the Israel priority application, i.e., a certified copy that is duplicative of the one filed previously.

The Applicant believes the amendments and remarks presented hereinabove to be fully responsive to all of the grounds of rejection and objection raised by the Examiner. In view of these amendments and remarks, the Applicant respectfully submits that all of the claims in the present application are now in order for allowance. Notice to this effect is respectfully requested.

Respectfully submitted,



CLIFFORD J. MASS
LADAS & PARRY LLP
26 WEST 61ST STREET
NEW YORK, NEW YORK 10023
REG. NO.30,086(212)708-1890